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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,246	10/31/2003	Nobuyuki Nonaka	SHO-0049	9027
	7590 06/08/2007 MAN & GRAUER PLLC		EXAMINER	
LION BUILDING			KARKHANIS, AASHISH	
1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			ART UNIT	PAPER NUMBER
	-,		3714	
			MAIL DATE	DELIVERY MODE
			06/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/697,246	NONAKA, NOBUYUKI			
		Examiner	Art Unit			
		Aashish Karkhanis	3714			
••	The MAILING DATE of this communication app					
Period for			·			
WHICH - Extension after SI - If NO po - Failure Any rep	RTENED STATUTORY PERIOD FOR REPLY EVER IS LONGER, FROM THE MAILING DAY IN THE MAILING DAY IN THE MONTHS from the mailing date of this communication. The strength of the specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, by received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICAT (6(a). In no event, however, may a reply build apply and will expire SIX (6) MONTHS to cause the application to become ABANDO	ION. se timely filed from the mailing date of this communication. ONED (35 U.S.C. § 133).			
Status	·					
1)⊠ R	esponsive to communication(s) filed on 19 Ma	<u>arch 2007</u> .				
2a)⊠ T	This action is FINAL . 2b) This action is non-final.					
=	·					
С	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositio	n of Claims					
4)⊠ C	4) Claim(s) 1-9 is/are pending in the application.					
48	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)□ C	laim(s) is/are allowed.					
·	laim(s) <u>1-9</u> is/are rejected.					
·	laim(s) is/are objected to.					
8)∐ C	laim(s) are subject to restriction and/or	election requirement.				
Application	n Papers					
9)∐ Tł	ne specification is objected to by the Examine	r.				
10)⊠ TI	ne drawing(s) filed on 22 June 2004 is/are: a)	igttize accepted or b) $igsqcup$ objected	to by the Examiner.			
	pplicant may not request that any objection to the o	• • • • • • • • • • • • • • • • • • • •				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)∐ Ti	ne oath or declaration is objected to by the Ex	aminer. Note the attached Off	tice Action or form PTO-152.			
Priority un	der 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
3	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
- Se	e the attached detailed Office action for a list of	or the certified copies not rece	eivea.			
Attachment(s	s)	_				
	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summ Paper No(s)/Ma				
3) Informa	tion Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	5) Notice of Inform 6) Other:				

Art Unit: 3714

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1 –9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al. (U.S. Patent 6,655,965 A).

Regarding Claims 1 – 2 and 5 – 6, Takemoto discloses a display device provided in a gaming machine such as a slot machine or a pachinko machine, wherein a pitch P between pixel units each of which is formed by arranging each kind of a plurality of kinds of pixel electrodes which display predetermined colors respectively (col. 1, lins. 20 – 25; where color slot machine games with liquid crystal displays are notoriously well known in the art), but does not disclose specific relationships between pitch, and distance using correction values. However, it would have been obvious to one of ordinary skill in the art at the time of invention to have included a distance d from the display device to a player in a normal game posture, and a correction value α satisfy a relationship of:

 $P = \tan (\pi/180/35) (d/2) (1+\alpha)$

where the correction value α is ± 0.2 .

Distance is specified as between 400 – 500 mm in applicant's specification as an optimal range for distance between a player and a liquid crystal display. This distance,

Art Unit: 3714

which is 0.5 m, would have been obvious to one of ordinary skill in the art because it is an intuitive distance between a player and a screen for comfortable operation of a game system where a player can rest an arm wile operating a gaming machine. This would mean that a comfortable distance is half the distance of an arm length, given that the majority of players' arms are greater than 0.8 m and less than 1.0 m.

A correction value of α is also given of 0.2 to provide a 20% tolerance on pitch value. Within digital display systems of all kinds, pitch is well known and established in the art as the distance between pixels in a display system. Modifying α within a 20% tolerance would allow a display to be optimized for a player at any distance within the 400-500 mm range for a slot machine. This would reduce problems such as a difficult to view large display if the average user were 300 mm away and the pitch equaled 0.30 without correction, or a difficult to view small screen if the average user were closer to 500 mm away and the pitch equaled 0.12 without correction.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the generic slot machine game with LCD of Takemoto to define an optimal distance between a user and a liquid crystal display as defined above in order to provide the most comfortable and enjoyable viewing and playing experience for a player.

Regarding Claims 3 and 7, Takemoto discloses a display device wherein the pixel electrodes are arranged in matrix on an x-y plane, and the pixel electrodes of the same color are arranged in a y direction and the same pattern is continuously arranged in an x direction to form a stripe (col. 8, lins. 30 – 34; where positions of screen

Art Unit: 3714

elements are given using coordinates and the display region is defined in terms of the number of dot pixels in horizontal and vertical directions, forming both a matrix and vertical and horizontal stripes).

Regarding Claims 4 and 9, Takemoto discloses a display device, wherein one pixel is constituted by a pair of the pixel units that are adjacent, and information signals for one pixel are supplied in the same timing to pixel electrodes for the same color that are contained in the pair of pixel units respectively (col. 1, lins. 20 – 25; where the use of color pixels and pixel electrodes to power liquid crystal displays is notoriously well known and established in the art).

Regarding Claim 8, Takemoto discloses a gaming machine wherein the display unit is a highly transmissive liquid crystal display provided in a game board (fig. 2, elems. 101, 110).

Response to Arguments

2. Applicant's arguments have been fully considered but they are not persuasive.

Applicant maintains that the claimed invention distinguishes over the prior art because Takemoto does not disclose the specific pitch relationship disclosed by the claimed invention. The examiner respectfully disagrees. As disclosed above, Takemoto discloses an LCD display, where modifying the pitch between pixels is notoriously well known and established in the art of LCD display. Further, as discussed above, motivation does exist to modify the pitch to a specific value as given by the applicant in order to provide a screen which is easily viewable to a player sitting an estimated armslength from a game screen.

Art Unit: 3714

Therefore, for the reasons given above, claims 1 – 9 stand rejected.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aashish Karkhanis whose telephone number is (571) 272-2774. The examiner can normally be reached on 0800-1630 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/697,246 Page 6

Art Unit: 3714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARK

/Corbett Coburn/ Primary Examiner AU 3714